

ANALYSIS

Upending assumptions in a post-pandemic world

Given the scope and magnitude of the COVID-19 pandemic, can the world afford to pay attention to climate change and the broader sustainability agenda? ask McKinsey's Dickon Pinner, Matt Rogers and Hamid Samandari.*

A ferocious pandemic is sweeping the globe, threatening lives and livelihoods. In the blink of an eye, the coronavirus has upended the world's operating assumptions. Amid this dislocation, it is easy to forget that just a few months ago the debate about climate change and sustainability was rising on the agenda of many public – and private-sector – leaders. Given the scope and magnitude of this sudden crisis, and the long shadow it will cast, can the world afford to pay attention to climate change and the broader sustainability agenda at this time?

Our firm belief is that we simply cannot afford to do otherwise. Not only does climate action remain critical over the next decade, but investments in climate-resilient infrastructure and the transition to a lower-carbon future can drive significant near-term job creation while increasing economic and environmental resiliency. And with near-zero interest rates for the foreseeable future, there is no better time than the present for such investments.

To meet this need and to leverage this opportunity, we believe that leaders would benefit from considering three questions:

- What lessons can be learned from the current pandemic for climate change?
- What implications – positive or negative – could our pandemic responses hold for climate action?
- What steps could companies, governments and individuals take to align our immediate pandemic response with the imperatives of sustainability?

Potential lessons

Understanding the similarities, the differences, and the broader relationships between pandemics and climate risk is a critical first

step if we are to derive practical implications that inform our actions.

Both pandemics and climate risk represent physical shocks (as opposed to financial shocks, such as bank runs, bubble bursts, market crashes, sovereign defaults or currency devaluations), which then translate into an array of socio-economic impacts. The current pandemic provides us perhaps with a foretaste of what a full-fledged climate crisis could entail in terms of simultaneous exogenous shocks to supply and demand, disruption of supply chains, and global transmission and amplification mechanisms.

Addressing pandemics and climate risk requires the same fundamental shift, from optimising largely for the shorter-term performance of systems to ensuring equally their longer-term resiliency. Healthcare systems, infrastructure, supply chains and cities have all been largely designed to function within a very narrow band of conditions. In many cases, they are already struggling to function within this band, let alone beyond it. The coronavirus pandemic and the responses that are being implemented illustrate how expensive the failure to build resiliency can ultimately prove. In climate change, as in pandemics, the costs of a global crisis are bound to vastly exceed those of its prevention.

Neither pandemics nor climate hazards can be confronted without true global coordination and cooperation. Additionally, both pandemics and climate risk are systemic, non-stationary, non-linear, regressive and risk multipliers – and neither are 'black swans'**. We often assume that the climate will continue to operate in a narrow band and then get surprised at how disruptive it is to move out of that narrow zone, even when we have been warned for years about the risk.

While the similarities are significant, there are also some notable differences between pandemics and climate hazards.

A global public-health crisis presents imminent, discrete and directly discernable dangers, which we have been conditioned to respond to for our survival. The risks from climate change, by contrast, are gradual, cumulative and often distributed dangers that manifest themselves in degrees and over time. What this means is that a global climate crisis, if-and-when ushered in, could prove far lengthier and far more disruptive than what we currently see with the coronavirus (if that can be imagined).

Pandemics are a case of *contagion risk*, while climate hazards present a case of *accumulation risk*. Contagion can produce perfectly correlated events on a global scale (even as we now witness), which can tax the entire system at once; accumulation gives rise to an increased likelihood of severe, contemporaneous but not directly correlated events that can reinforce one another. This has clear implications for the mitigation actions they each call for.

Implications for climate action

While the crisis and plans for recovery are still unfolding, we can already start seeing how the pandemic may influence the pace and nature of climate action, and how climate action could accelerate the recovery by creating

Wind and solar are suggested transition paths for governments, business and society after the COVID-19 pandemic

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jobs, driving capital formation and increasing economic resiliency.

Certain temporary adjustments, such as teleworking and greater reliance on digital channels, may endure long after the lockdowns have ended, reducing transportation demand and emissions. Supply chains may be repatriated and markets may better price-in risks as the result of a greater appreciation for physical and systemic dislocations. This would create the potential for additional near-term business-model disruptions and broader transition risks, but also offer greater incentives for accelerated change. There may, additionally, be an increased public appreciation for scientific expertise in addressing systemic issues.

While not a foregone conclusion, there may also be a greater appetite for the preventive and coordinating role of governments in tackling such risks. Indeed, the tremendous costs of being the payor, lender and insurer of last resort may prompt governments to take a much more active role in ensuring resiliency. The tide may be turning toward 'building back better' after the crisis. Moreover, lower interest rates may accelerate the deployment of new sustainable infrastructure, as well as of adaptation and resilience infrastructure – investments that would support near-term job creation. Also, the need for global cooperation may become more visible and be embraced more universally.

If the past is prologue, both the probability of such shifts and their permanence are likely to be proportional to the depth of the current crisis itself. Very low prices for high-carbon emitters could increase their use and further delay energy transitions. Governments and citizens may struggle to integrate climate priorities with pressing economic needs in a recovery. This could affect their investments, commitments, and regulatory approaches – potentially for several years, depending on the depth of the crisis and hence the length of the recovery. Investors may delay their capital allocation to new lower-carbon solutions due to

decreased wealth. Finally, national rivalries may be exacerbated if a zero-sum-game mentality prevails in the wake of the crisis.

What should be done?

In this context, we believe all actors – individuals, companies, governments and civil society – will have an important role.

For governments, there are four important questions to consider:

- Do we have the capability to model climate risk and to assess the economics of climate change? Building this capability can help inform recovery programmes, update and enhance historical models that are used for infrastructure planning and enable the use of climate stress testing in funding programmes.
- Can the resources being deployed for economic recovery also support our climate-change resiliency and mitigation objectives? This could include investments in a broad range of sustainability levers, including building renewable-energy infrastructure, expanding the capacity of the power grid and increasing its resiliency to support increased electrification, retrofitting buildings, and developing and deploying technologies to decarbonise heavy industries.
- Are there changes needed to our existing programmes that we could make in tandem with other efforts? This could include updates to existing subsidy regimes to help accelerate climate resilience.
- How do we reinforce national and international alignment and collaboration on sustainability? Our experiences in the weeks and months ahead could help inform new paths toward achieving alignment on climate change.

For companies, there are two questions to consider.

- How could we seize the moment to decarbonise, in particular by prioritising the retirement of economically marginal, carbon-intensive assets?
- Could we take a more systematic and through-the-cycle approach to building resilience? Companies have fresh opportunities to make their operations more resilient and sustainable as they experiment out of necessity

– for example, with shorter supply chains, higher-energy-efficiency manufacturing and processing, video-conferencing instead of business travel, and increased digitisation of sales and marketing.

For companies and public entities, when it comes to resilience, a major priority is building the capability to truly understand, qualitatively and quantitatively, corporate vulnerabilities against a much broader set of scenarios, and particularly physical events. In that context, it will also be important to model and prepare for situations where multiple hazards would combine. Indeed, it is not difficult to imagine a pandemic resurgence coinciding with floods or fires in a given region, with significant implications for disaster response and recovery.

For all – individuals, companies, governments and civil society – two priority questions could be considered:

- How could we use this moment to raise awareness of the impact of a climate crisis, which could ultimately create disruptions of great magnitude and duration? This includes awareness of the fact that physical shocks can have massive non-linear impacts on financial and economic systems and thus prove extremely costly.
- How could we build upon the mindset and behavioural shifts that are likely to persist after the crisis (such as working from home) to reduce the demands we place on our environment – or, more precisely, to shift them toward more sustainable sources?

Moving toward a lower-carbon economy presents a daunting challenge and, if we choose to ignore the issue for a year or two, the maths becomes even more daunting. In short, while all hands must be on deck to defeat the coronavirus and to restart the economy, to save lives and livelihoods, it is also critical that we begin now to integrate the thinking and planning required to build a much greater economic and environmental resiliency as part of the recovery ahead. ●

* This article is based on *Addressing climate change in a post-pandemic world* published by McKinsey, April 2020.

** A 'black swan' is an unpredictable event that is beyond what is normally expected of a situation and has potentially severe consequences.